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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/681,936	06/28/2001	Steven C. Wotring	800549	1062

23372 7590 12/12/2003

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EXAMINER

CHANNAVAJALA, SRIRAMA T

ART UNIT	PAPER NUMBER
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2177

DATE MAILED: 12/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/681,936

Applicant(s)

WOTRING ET AL.

Examiner

Srirama Channavajjala

Art Unit

2177

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 June 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Drawings

1. The Drawing filed on 2/9/00 is acceptable for examination purposes only; formal drawings are required in response to this office action. [see 37CFR 1.84 or 1.152].

Information Disclosure Statement

2. The information disclosure statement filed on 8/19/03, paper no. # 5 has been considered and a copy was enclosed with this Office Action. [See paper no. # 6].

Priority

3. Applicant's claim for domestic priority under 35 U.S.C. 119(e) is acknowledged. based on Provisional Application No. 60/214,892, filed on 29 June 2000.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

4. Claims 1-34 are rejected under 35 U.S.C. 102(a) as being anticipated by Sacks, US Patent No. 5974407.

5. As to Claims 1,18,24, Sacks teaches a system which including 'sharing data between relational database and a hierarchical database' [see Abstract, fig 2, col 1, line 9-12], Sacks specifically teaches for example both hierarchical database and relational database, hierarchical database corresponds to fig 2, element 2-24, relational database corresponds to fig 2, element 2-12, 'defining a hierarchical data entity including a plurality of elements' [col 5, line 25-31, col 7, line 58-67, fig 1A-1E], Sacks is directed to hierarchical database, more specifically defining hierarchical database that satisfies at minimum first a hierarchical database, second, hierarchical database specifying root conditions and child conditions and like as detailed in col 7, line 60-67, 'mapping each of the plurality of elements in the hierarchical data entity to information in a relational dataset contained in a relational database' [col 15, line 48-67, col 16, line 1-13, fig 9A,], Sacks specifically teaches mapping data between hierarchical and relational databases, plurality of elements corresponds to fig 9A,-12,9A-18 and like as detailed in fig 9A, 'transforming the relational dataset information into corresponding mapped elements in the hierarchical data entity to form a hierarchical data structure' [col 16, line 46-60], Sacks specifically teaches for example hierarchical database consists of root node and child nodes such as detailed in fig 9A-18,9A-20,9A-30 and also noted that these are equivalent to rows such that the hkey value is the same as the parent as detailed in col 16, line 54-60, 'accessing data from the hierarchical data structure corresponding to the relational dataset information in the relational database' [col 17, line 66-67, col 18, line 1-10].

6. As to Claims 2, 4, 19, 21, 25-26, the limitations of this claim have been noted in the above rejection. In addition, Sacks disclosed 'defining a hierarchical data entity comprises defining a hierarchical data entity' [col 7, line 50-67, col 16, line 3-12, fig 1A-1E, fig 15], Sacks specifically teaches for example entity-relation in hierarchical databases as detailed in fig 15, 'mapping information corresponds to fig 9A-9C.

7. As to Claim 3, 20, the limitations of this claim have been noted in the above rejection. In addition, Sacks disclosed 'identifying each of the plurality of elements by an element name without reference to an entity path' [fig 9A-9C].

8. As to Claim 5, 22, the limitations of this claim have been noted in the above rejection. In addition, Sacks disclosed 'plurality of elements by an entity path referencing all parent elements in the entity path' [col 8, line 49-67, fig 1B-iD], entity path referencing all parent elements corresponds to hierarchical family with root 1D-10 having root entry 1D-14, under parent, child levels as detailed in fig 1B-1D.

9. As to Claim 6, 23, 27, the limitations of this claim have been noted in the rejection above. In addition, Sacks disclosed 'hierarchical data entity comprises defining simple elements and compound elements' [col 8, line 17-26, fig 1B, 1D-E, col 11, line 9-25].

10. As to Claim 7-8, 28-29, the limitations of this claim have been noted in the rejection above. In addition, Sacks disclosed 'defining a simple element comprises defining an element name and mapped fields' [fig 1D-iE,col 9, line 1-15].

11. As to Claim 9-10, 30-31, the limitations of this claim have been noted in the rejection above. In addition, Sacks disclosed 'defining a compound element comprises defining an element name, a database name, a database command and database fields' [col 9, line 1-15].

12. As to Claim 11, the limitations of this claim have been noted in the rejection above. In addition, Sacks disclosed 'reading the hierarchical data entity' [col 11, line 34-36, fig 4], 'determining if a root element is present' [col 11, line 44-46, 4-16], 'ending the mapping process if no root element is present' [col 11, line 44-46], 'mapping each compound element of the plurality of elements if a root element is present' [col 11, line 49-51], 'mapping each simple element of the plurality of elements if a root element is present' [col 10, line 35-46, fig 3A].

13. As to Claim 12, the limitations of this claim have been noted in the rejection above.. In addition, Sacks disclosed 'specifying a database comm. Expression for the compound element' [col 11, line 59-63], 'executing the database command expression' [fig 9C-9D].

14. The limitations of Claims 13-16 have already been discussed in the rejection of claims 1-12 above. They are therefore rejected on the same grounds.

15. As to Claim 32, 34, Sacks teaches a system which including 'a data structure for sharing data between relational and hierarchical databases' [see fig 2], 'a hierarchical data structure having a plurality of simple and compound elements stored in the memory' [col 5, line 32-36, line 37-41], 'database commands embedded in the compound elements for accessing information in a relational database' [col 17, line 66-67, col 18, line 1-10], 'tabular datasets created in the memory for storing the accessed information from the relational database' [col 20, line 55-63], 'a relationship between the elements of the hierarchical data structure and the tabular datasets' [col 25, line 7-20].

16. As to Claim 33, the limitations of this claim have been noted in the above rejection. In addition, Sacks disclosed 'an element name property' [col 15, line 5-6], 'a database name property' [col 15, line 38-39], 'a database command expression' [col 15, line 39-42], a database fields property' [col 18, line 31-41].

Conclusion

The prior art made of record

a. US Patent No. 5974407

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure

b. US Patent No. 6539398

c. US Patent No. 5724577

d. US Patent No. 6199059

e. US Patent No. 6480857

f. US Patent No. 6101502

g. US Patent No. 6594672

h. US Patent No. 5717924

i. US Patent No. 6076090

j. US Patent No. 6374252

k. US Patent No. 6377934

l. WO 00/23917


Meier A et al. Hierarchical to relational database migration,
Software IEEE vol 11, issue :3, may 1994, pp 21-27

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Srirama Channavajjala whose telephone number is (703)308-8538. The examiner can normally be reached on Monday-Friday from 8:00 AM to 5:30 PM Eastern Time. The TC2100's Customer Service number is (703)306-5631.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Breene, can be reached on (703)305-9790. The fax phone numbers for the organization where the application or proceeding is assigned are as follows:

703/746-7238	(After Final Communication)
703/872-9306	(Offical Communications)
703/746-7240	(For Status inquiries, draft communication)

Any inquiry of general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703)305-9600.

sc 
Patent Examiner.
December 9, 2003.